A STUDY OF DAIRY CO-OPERATIVES IN INDIA - SHIFT IN MARKETING METHODS IN RECENT TIMES

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Abstract

Dairy co-operatives in India emerged as one of the largest rural employment scheme, enabling the modernization of the dairy sector to a level from where it can take off to meet not only the country's demand for milk and milk products but can also exploit global market opportunities. It is advised especially for underdeveloped countries due to its advantage in employee absorbing capacity, rural production, nutritional requirement, supporting agriculture and allied activities etc. In India Dairy cooperatives geared up with establishment of AMUL as a leading cooperative in this field there by encouraging the growth of many other such cooperatives across the country in the recent past. The present paper tries to throw light on the most recent developments in the field of dairy cooperatives farming, which includes Crossbreeding, establishing semen stations, importing hybrid bulls, imported Embryos, fodder development agency, village procurement system etc. in the field of dairy farming. It also focuses on the channels of marketing milk in rural and urban areas. Organized and unorganized channels of marketing systems of dairy products are in place. The dominance of unorganized sector (80%) marketing over the organized sector (20%) marketing is still the cause of worry. There is always a chance of exploitation if the marketing is not organized. The paper suggests that government should take massive steps to bring qualitative changes in the dairy cooperatives, mainly because of its necessity to a country like India where, there is cheaper labour, issue of unemployment, availability of sufficient pasture fields etc. The paper proposes to take the service of trained skilled personnel to answer all these difficulties faced by the dairy farming sector in India.

Key words: Marketing, Dairy, Cooperatives, Trends, Channels, AMUL, Fodder, Challenges.

1. Introduction

Around the globe we may roughly estimate that modern cooperatives have emerged in the past 200 years. These institutions existed all over the world supplying necessary services which would otherwise be unattainable to a common man. In a number of under developed countries cooperatives such as credit unions and agricultural organisations have been successfully helping people to provide for themselves with most essential services. In the recent times cooperatives have been able to emerge as a powerful viable economic model and in some countries they in a commanding position within the national economy.

The first cooperative Society Act of 1904 was enacted to enable formation of agricultural credit cooperatives in villages in India under Government sponsorship on the suggestion of Nicholson a British Officer. This paved the way for direct legal identity as every agricultural cooperative was to be registered under this Act to get recognition. The act of 1904 was repealed by cooperative Societies Act of 1972 which provided chance for the formation of cooperatives other than credit societies. In 1942, the then British Government enacted the Multi-Unit

Cooperative Societies Act, with the goal of covering societies whose operations are extended to more than one state. The Central Government enacted a comprehensive Act known as Multi State Cooperative Societies Act in 1984 repealing the earlier Act of 1942 mainly to achieve more inclusive growth.

According to Zeull and Cropp (2004), the birth and evolution of co-operative movement and establishment of co-operative form of business organization took place during the times of economic slowdown, distress and social turmoil in different cultures to minimize the damage by regrouping the society.

2. Literature Review

The study conducted by Shadbolt and Apparao, (2016) comes up with the conclusion that, the self-sufficiency rate, defined as the ratio of a country's or region's share of global milk production and global milk consumption is important for influencing the degree and direction of trade flows. Ortiz-Ospina, (2018) most trade theories focus on sources of comparative advantage while postulating that all nations can gain from trade by capitalizing on their production-related strengths.

Rajarajan et al. (2007) observed that India had been importing greater amount of dairy products from developed countries compared to developing countries. The study states that India gained competitive advantage in terms of exporting SMP, WMP, and ghee with the introduction of trade reforms. Kumar (2010) analysed the competitiveness of livestock products and key factors affecting the export of livestock products. The work showed that trade liberalization had enhanced the export performance of livestock products. The study further noted that India lacks competitiveness in the area of exporting milk and milk products.

3. Objectives

1. To understand the concept of Dairy cooperatives?
2. To study the recent developments in the field of dairy cooperatives in India
3. To identify the opportunities and challenges of dairy marketing
4. To suggest measures for the development of dairy cooperatives.

4. Research methodology

The study mainly uses secondary data and the informations related to dairy cooperatives, initiatives taken by the government to channelize dairy products, marketing strategy, training etc. are taken from the electronic resource. Websites and articles are utilized to conduct this study.

5. Dairy cooperatives - Global Scenario

Though the production of milk is over 700 billion liters a year by dairy companies around the world still the global demand for dairy products is increasing. The reasons for the increasing demand are population growth, increased disposable incomes, increased per day consumption and preference for dairy products as part of diet (Mani 2013). Europe's top 10 dairy companies are run by cooperatives. Friesland Campina from Netherlands, Germany and Belgium is the biggest dairy cooperative in the world. In terms of revenue Nestle a Switzerland based company is the largest in Europe followed by Danone from France.

The cooperatives are mainly sponsored by government in developing countries. For

instances, in India, cotton textiles, sugar and dairy cooperatives were the examples of success stories. In Tanzania and Kenya coffee cooperatives were doing well with government support. Bangladesh has textile cooperatives and self-help groups (SHG) which are becoming financially viable business units. In India after liberalization and globalization the dairy cooperatives survived and were effective even after withdrawal of support by the government.

6. Dairy cooperatives - Indian Scenario

During the last five years ending 2015-16 the average annual incremental production of food grain in India was 2.05 million tones, however, in the same period; the average annual incremental milk production was over six million tones. The variation between the growth rate in food grain production and milk production is partially because of volatility factor in agricultural production and robustness in milk production. India's estimated milk production in 2015-16 was

There were success stories in sugar and cotton cooperatives in India in the pre liberal regime. However, after 1990's New Economic policy with the withdrawal of government support and subsidies all kinds of cooperatives had to face the competition and many were forces to shut down. However one kind of cooperative which stood the test of time and continued its success story with steady profits and also contributed to the welfare of its members is dairy cooperatives.

7. Recent Initiatives under Dairy Cooperatives

India has the rich heritage of protecting the cattle population since time immemorial which naturally helped the dairy farming in a big way. Preserving the cattle breeds rearing them with utmost care started rewarding both rural and semi rural population. Following are some of the recent initiatives taken in dairy farming enterprise in India.

7.1 Production of High Genetic Merit (HGM) Cattle and Buffalo Bulls

Production of High Genetic Merit (HGM) Cattle and buffalo bulls of different breeds for production of high quality disease-free semen doses was encouraged. The initiatives like: Progeny Testing Programme (PTP), Pedigree Selection Programme (PSP), Importing of Bulls/Embryos and Bull breeding through Imported Embryos. This arrangement aims at producing and supplying replacement requirement of HGM bulls for frozen semen stations across the country by end of the project period.

7.2 Progeny Testing Programme (PTP)

This initiatives aims at making high genetic merit bulls available to major dairy breeds of cattle and buffalo to semen stations for production of high-quality disease-free semen. Thirteen sub projects with operations in nine states have been approved with a total outlay of Rs. 2,380.86 million. Till March 2016 these sub projects have made available 469 HGM bulls out of which 446 bulls have been distributed (NDDB 2015-16). An agreement has been signed between NDDB and Anand Agricultural University to encourage and facilitate collaborative research projects in the field of animal genetics and breeding to develop methodologies for collection of performance records of various cattle and buffaloes in the field with present Progeny Testing (PT) programmes.

7.3 Pedigree Selection Programme (PSP)

The purpose of this programme is conserving and promoting indigenous breeds of cattle and buffalo in their native tracts by making available high genetic merit bulls for semen production. Regular farmer contact programmes are being organized in Pedigree Selection sub project areas to build awareness about the importance of AI programmes. Farmers and subject matter specialists from NDDB, NGOs and veterinary colleges were consulted in this regard. The progressive farmers from various regions are provided with required informations on the importance of preserving indigenous breeds.

7.4 Import of Bulls/Embryos and Bulls Production through Imported Embryos

An initiative called Import of Bulls/Embryos and Bulls Production through Imported Embryos was introduced to meet the requirement of pure Jersey and Holstein Friesian bulls for high quality semen production to make available breedable animals of Jersey and Holstein Friesian breed. These bulls are being closely monitored for their growth and also meetings were organized to discuss management, housing, monitoring of growth and traceability issues.

7.5 Strengthening of Semen Stations

The existing semen stations are upgraded and being supported to expand their facilities to meet the increasing demand for frozen semen doses for Artificial Insemination. The semen stations have placed the civil work orders and most of them are in advance stages of completion. Overseas exposure and a training programme was organized on 'Advanced Frozen Semen Technology and Breeding' in Netherlands. Most advanced informations on the issues like advances in frozen semen technology, reproductive technology, basic principles of genetic improvement, hoof care management, cattle breeding programme, cow signals and semen-sexing technology were made available to the farmers. To carry out effective implementation of animal health measures, Animal Health Officers have been appointed in all the Progeny Testing, Pedigree Selection and Strengthening of Semen Stations sub projects.

7.6 Ration Balancing Programme (RBP)

Under this programme, the Local Resource Person (LRP) formulates a least-cost balanced ration for milch animals from locally available feed resources using the software INAPH. A balanced ration fed to milch animals helps in ensuring that the milch animals produce milk commensurate with their genetic potential. Feeding the balanced ration to milch animals not only reduces the cost of feeding per kg of milk but also helps in significantly reducing the methane emissions

7.7 Fodder Development Programme (FDP)

Under this scheme certified and truthfully labeled seeds are being promoted to increase fodder production and field demonstrations of mowers, silage making and biomass storage silos are being used to these techniques popular among farmers. These projects have undertaken 1,251 fodder demonstrations, 1,396 mower demonstrations and have built 60 biomass storage silos. These demonstrations have resulted in the adoption of the technology by farmers and till March 2016, more than 1,100 farmers have adopted the fodder conservation practices. Extension material in the form of a handbook 'Compendium on Fodder Production' in Hindi was published during the year. Pamphlets on weed (Coronopus didymus), silage making from maize stover and

posters on silage making have also been developed (NDDB 2015-16).

7.8 Village-Based Milk Procurement System (VBMPS)

The Village-Based Milk Procurement System (VBMPS) aims at providing rural milk producers with greater access to the organized milk-processing units by forming and strengthening dairy cooperatives and producer companies. Apart from forming new societies and pooling points, existing ones are being strengthened by providing village level capital items like bulk milk coolers, milk cans, etc. Strengthening of the dairy cooperative societies has resulted in more transparency, flexibility in pouring milk, improvement in quality of milk and fairness in milk procurement operations.

7.9 Training and Capacity Building (TCB)

A number of training and capacity-building programmes have been organized for farmers and field functionaries to upgrade the knowledge base and the skill sets required for successful implementation of the projects. These training and capacity-building programmes are being organized by NDDB. During the year 2015-16, 5.78 lakh participants have been trained in the programmes organized by NDDB, Cumulatively 7.29 lakh participants have been trained/oriented. (NDDB 2015-16).

8. The marketing channels of Dairy Cooperatives

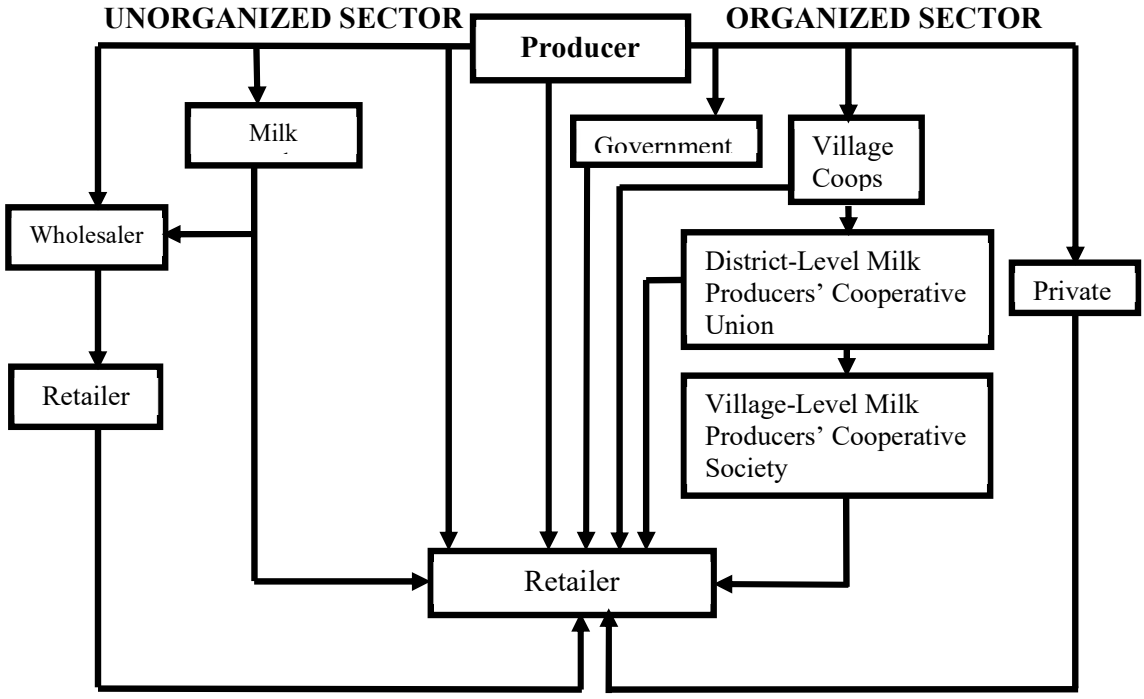

Figure 1. Milk-Marketing Channels in India

India has one of the largest cattle and buffalo populations in the world. More than 67 percent of dairy animals are owned by marginal and small farmers, which constitute the core milk-production sector in the country. Most of these farmers own dairy animals mainly to supply milk for the family consumption. It is estimated that just around 30 percent of the milk produced in the country is retained by the households for self consumption. The schematic diagram of milk marketing channels in India is presented in Figure 1.

Around 80% of milk produced is marketed through the highly fragmented unorganized sector, which includes local milk vendors, wholesalers, retailers, and producers. Whereas, the organized dairy industry, which accounts for about 20 percent of total milk supply, comprises two main sectors: government and co-operatives. Even though co-operatives provide a better price to the producer, the unorganized sector plays a major role in milk marketing mainly due to three factors. They are-

1. The pricing policy of the co-operatives: their purchase price is based on the fat content of the milk, whereas the private sector pays a flat rate per liter of milk.

2. The second factor, which motivates the milk producers to sell milk to private vendors, involves the type of milk animals reared by the producer. Crossbred cows yield more milk with a lower fat than buffalo. The crossbreed cow population has increased over years because of artificial insemination and improvements in management practices.

3. The third factor is payment policy. The private sector can pay their producers every day, whereas the co-operatives pay weekly or fortnightly. Producers sometimes have to fight with the co-operatives to get their payments. Within the organized sector, the co-operative sector is by far the largest in terms of volumes of milk handled, installed processing capacities, and marketing infrastructure. The eighty-two (82) thousand Dairy Co-operative Societies (DCSs) across the countries have a strong membership of nearly 10 million landless, marginal, and smallholder milk producer families.

Even though the organized sector handles less than 20 percent of the production, it has an installed capacity of processing about 33 percent of India's total milk production. Much of the processing capacity created by the private sector in the wake of the liberalization of the Indian economy in 1991 remains idle; only about 60 percent of the installed capacity of the private sector is operated on a day-to-day basis. In the co-operative sector, all plants are used to their full capacity and remain under-utilized only during the lean production season.

9. Threats and Challenges of Milk Marketing

The dairy sector in India is characterized by small-scale, scattered, and unorganized milk-animal holders; low productivity; inadequate and inappropriate animal feeding and health care; lack of an assured year-round remunerative producer price for milk; an inadequate basic infrastructure for provision of production inputs and services; an inadequate basic infrastructure for procurement, transportation, processing and marketing of milk; and lack of professional management. Other important characteristics of the dairy sector are the predominance of mixed crop-livestock farms and the fact that most of the milk animals are fed on crop by-products and residues, which have very low opportunity costs.

Low productivity of milk animals is a serious constraint to dairy development. The productivity of dairy animals could be increased by crossbreeding with selected indigenous purebreds or suitable exotic breeds in a phased manner. The cattle-breeding policy should focus on milk yield as well as production of good-quality bullocks to meet the draft-power requirements of agriculture. Upgrading nondescript buffalo through selective breeding with high-yielding purebreds such as Murrah, Mehsani or Nili Ravi should be given high priority to arrest low productivity.

Liberalization of world trade in dairy products under the new trade regime of the WTO poses new challenges and has opened up new export opportunities for the dairy industry. It is vital for the dairy sector in India to enhance its competitive economic advantage in dairy products

in terms of both quality and cost and its credibility in international markets. The role of government should be to direct, coordinate, and regulate the activities of various organizations engaged in dairy development; to establish and maintain a level playing field for all stakeholders; and to create and maintain a congenial socio-economic, institutional, and political environment for dairy development.

In spite of many fold growth the milk marketing in India remains grossly primitive compared to its western counterparts. It begins with the largely unregulated sector, which handles the majority of the milk production, providing ample opportunity for malpractice. Some of the common forms of malpractice include false measurements in the selling of milk and adulteration of milk.

Another major impediment of the milk marketing system in India is the presence of numerous intermediaries, which take advantage of producers' weakness. In many cases, intermediaries dictate the price by advancing a loan to the milk producers. Producers' bargaining power is also limited because of quickly perishable and bulkiness of milk. In addition, the lack of proper infrastructure for transportation, distribution, and storage also makes milk procurement difficult. On the other hand, it will be impossible for most producers to market their milk without the presence of these market intermediaries. The Cooperative Societies Act continues to be restrictive rather than enabling, even though the Anand Pattern milk producers' co-operatives have emerged as the most stunningly effective institutional model for milk marketing. The cooperative laws in general have altered to enable the emergence of true leadership, professional management, and democratic functioning of the co-operatives.

Former Chairman Kurien bears out the statement, "Failure is never final, and success never ending." to describe the current status of the dairy industry in India. The Indian dairy industry needs to focus simultaneously on the four-fold challenge of product development, infrastructure-support development, quality and global marketing. Equally urgent is the need for strategic alliances with some of the leading dairy companies in the world for technical collaboration and marketing tie-ups. Raw-milk handling needs to be upgraded in terms of physicochemical and microbiological attributes of the milk collected.

Conclusions

The analysis reveals that there is much growth of dairy cooperatives in the recent past, despite many issues it faced. This sector holds high promise as a dependable source of livelihood for the vast majority of rural poor. The diary co-operatives will play a major role in our nation's economy in the years to come. Dairying can be a very good source employment and business opportunity for poverty alleviation if the capacity utilized to the maximum level. It is to the successive governments to draft and implement favorable policies with support operations under enabling environment for improving the efficiency and measurement system in the market. Policy should focus on eradicating the menace of intermediaries in dairy farming to enable faster growth of dairy sector in India. Aiming at the international market to gain higher income is the need of the hour in the Globalised world. Improving the nutritional standards of our people also add to the importance that needs to be attached to this sector in the 21st century.

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